Overview

Motorised Curtains and Blinds can be controlled via relay pairs contained in Rako's range of contollers. Configured to suit most motor types, whether that be 240V roller, Venetian or Roman blinds, curtain tracks or low voltage motors.

Wired or Wireless

Rako modules and RAKs can be controlled from either the Rako wireless or CAT5 wired communication.

Module Options

RACUB – The universal control module. Can be wired to suit all options but may require more wiring than other modules.

WM-CUB channel equivalent of the standard RACUB but is a RAK8 insert card for centralised systems and the Rako CAT5 wired network. Auxillary 240V terminals on the RAK8 simplify wiring for 240V motors.

RACUB-2L – Similar to the standard RACUB but with internal wiring for simpler installation with 240V tubular motors.

RACUB-24DC – Similar to the standard RACUB but with internal wiring for simpler installation with 24VDC tubular motors with 2 wire operation.

Features

All module options share the same control and programming features. By default all units respond to both Scene commands (Defaults are Scene 2=Up, Scene 4=Down, Scene 3=Stop) and Raise/Lower commands.

Accurate control of the end-limits are set within the motors themselves but the Rako modules have an adjustable Timeout feature (default one minute) which opens the relays to avoid having permanent power fed to the motors.

The wound coils in electric motors store a large amount of energy in magnetic fields which can cause large currents leading to arcing and relay damage. To prevent this Rako modules have a 'Stop on Changeover' function. This allows one relay to stop the motor before the second reverses the motor when trying to perform an immediate reverse of direction.

Motor Type

240V Tubular Motors

To be successfully controlled by a Rako system motors must be designed to be controlled from external relays feeding power to one winding for Up and one winding for Down. Motors that have their own proprietry control system embedded in the motor cannot be controlled from Rako curtain and blind modules*. This is most apparent by the motor having 3 wires coming from the motor (L, N + E) rather than the 4 wires (L, L, N + E) required.

* Motors with embedded control systems may be controllable if they are available with an interface for external control. See the section 'Interfaces' for details.

RACUB

RACUB-2L
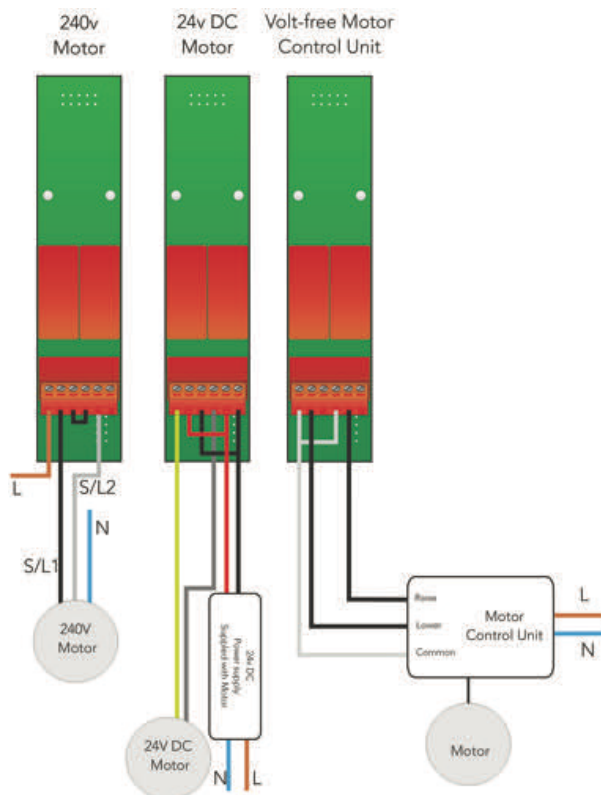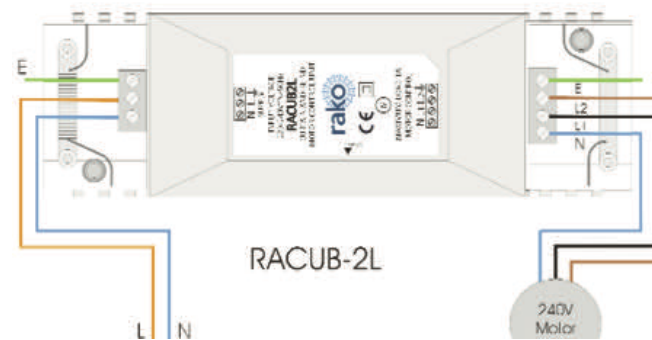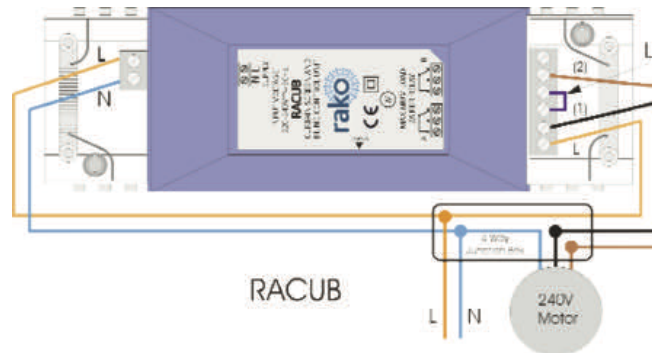
Motor Type

24V DC Motors – 2 Wire

DC motors that have 2 wire connections require a reversal of polarity to change direction. 24V DC power is supplied by the motor manufacturer's power supply.


RACUB

RACUB-24DC
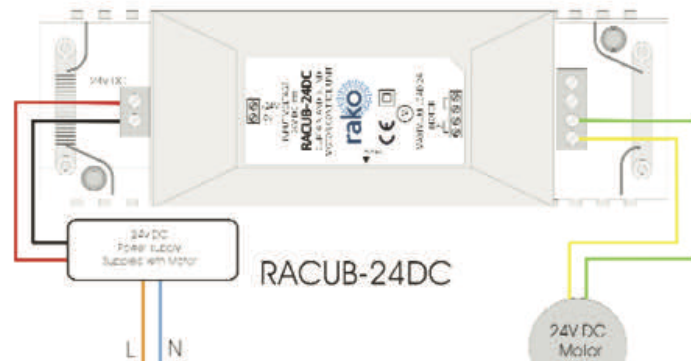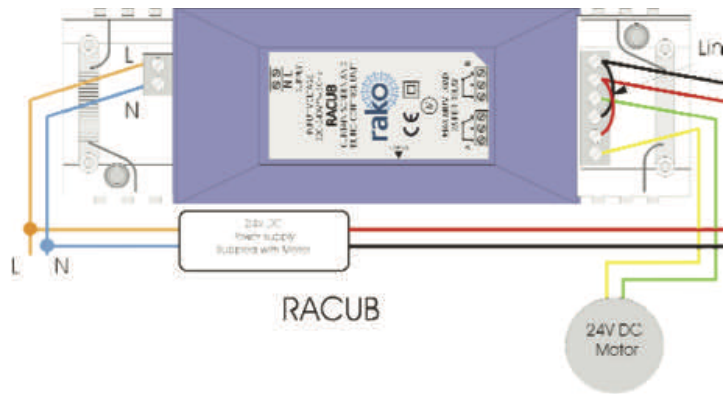
Volt Free Control

Some motors require volt-free contact closures which operate a Motor Control Unit supplied with the motor.

Curtain Motors

Most curtain motors can be controlled by a Rako RACUB or WM-CUB, the control requirements can differ depending on the make and type of motor in question. Refer to Rako's technical support department for more information.

RACUB
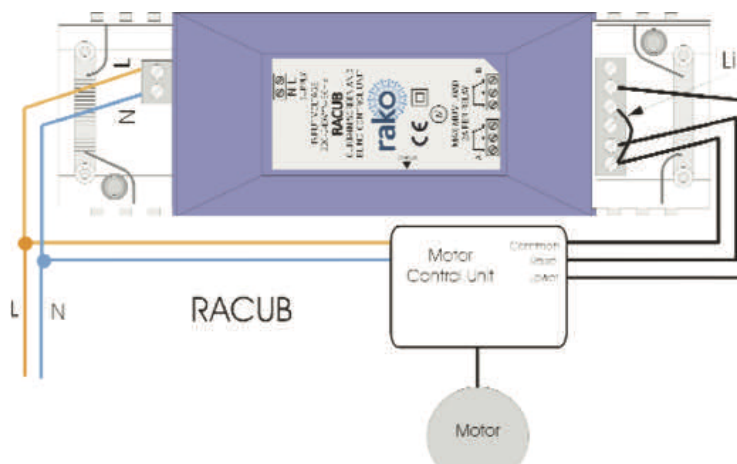
Control

Rako curtain and blind modules can be operated by any of the controllers and interfaces available for the lighting control system, these include Infra Red, Volt Free contact closure, RS232, and IP. Controllers include Rako wallpanels, hand held remotes, and iPhone, iPad and Android interfaces.

Button Control format

As the standard scene configuration for lighting is not a logical control format for blinds and curtains, most Rako controllers have options for more sensible layouts for such control. Typically these controls have 3 buttons, for open/close and stop functions. For areas where two separate channels of controls are needed 6 button options are available (e.g. where separate control for blinds and curtains are required or where separate control for different aspects is needed).

When curtain and blind control is required in the same room as the lighting control, keypad options are available that combine both from either single or double gang plates. Standard layouts are available (see keypad range data sheets) or with Rako's programmable keypads and custom etching options creating a bespoke keypad is possible.

Refer to Classic, Eos and Modular Keypad data sheets for layout information.

Control from smart phones

Apps for iPhone/iPad and Android devices allow you to control the room and when possible individual blinds/curtains. With the Hub you can set timers to open or close your window treatments and also control them from anywhere in the world.

Interfaces

Hubs are the interfaces between Rako systems and others, either via pre-built driver interfaces between systems or using custom strings sent from the Hub. The Hub can output TCP, UDP or HTTP.

The WRA-232 allows for an RS232 data link as some curtain and blind motors with embedded control systems have interface units available which can accept custom RS232 commands, the WRA232 can be used to send commands to these units, allowing override control of the motors from the Rako System.

Other interfacing is typically achieved via triggering volt free contacts from the Rako system into an interface kit for 3rd party control on the blind/curtain system.

Router